

J. Pandel et al.
U.S. Serial No. 09/762,408
Page 3 of 9

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claims 1-10 (canceled)

Claim 11 (currently amended): A method for motion estimation in a digitized image having pixels, comprising:

grouping pixels in picture blocks,

in which the pixels are grouped to form at least one first picture area and one second picture area;

wherein first motion estimation is carried out in a first search area for at least one first picture block in the first picture area to determine a first motion vector whereby movement of the first picture block is described in comparison to the first picture block in a preceding ~~predecessor~~ picture and/or in comparison to the first picture block in a subsequent ~~successor~~ picture;

wherein second motion estimation is carried out in a second search area for at least one second picture block in the second search area to determine a second motion vector whereby movement of the second picture block is described in comparison to the second picture block in a preceding ~~predecessor~~ picture and/or in comparison to the second picture block in a subsequent ~~successor~~ picture;

wherein the first search area and the second search area are of different sizes; and

wherein the size of the first search area and/or of the second search area is varied as a function of a predetermined picture quality, ~~whereby~~ according to which the first picture block and/or the second picture block are/is coded.

Claim 12 (original): The method of claim 11 wherein the size of the first search area and/or of the second search area are/is varied as a function of a quantization parameter whereby the first picture block and/or the second picture block are/is quantized.

J. Pandel et al.
U.S. Serial No. 09/762,408
Page 4 of 9

Claim 13 (currently amended): The method of claim 11 used for coding the digitized ~~picture~~image.

Claim 14 (original): The method of claim 13 wherein variable length coding of the motion vectors is carried out; and a number of stored, different tables, in which codes for variable length coding are stored, are used for variable length coding.

Claim 15 (original): The method of claim 14 wherein the tables are matched to the maximum length of the motion vectors.

Claim 16 (currently amended): An arrangement for motion estimation in a digitized image having pixels, comprising:

a processor which is set up such that the following steps can be carried out:

the pixels are grouped in picture blocks;

the pixels are grouped to form at least one first picture area and one second picture area;

first motion estimation is carried out in a first search area for at least one first picture block in the first picture area to determine a first motion vector whereby movement of the first picture block is described in comparison to the first picture block in a preceding ~~predecessor~~ picture and/or in comparison to the first picture block in a subsequent ~~successor~~-picture;

second motion estimation is carried out in a second search area for at least one second picture block in the second search area to determine a second motion vector whereby movement of the second picture block is described in comparison to the second picture block in a preceding ~~predecessor~~-picture and/or in comparison to the second picture block in a subsequent ~~successor~~ picture;

in which the first search area and the second search area are of different sizes; and

in which the size of the first search area and/or of the second search area is varied as a function of a predetermined picture quality, ~~whereby~~according to which the first picture block and/or the second picture block are/is coded.

J. Pandel et al.
U.S. Serial No. 09/762,408
Page 5 of 9

Claim 17 (original): The arrangement of claim 16 wherein the processor is set up such that the size of the first search area and/or of the second search area are/is varied as a function of a quantization parameter whereby the first picture block and/or the second picture block are/is quantized.

Claim 18 (original): The arrangement of claim 16 used in a picture coding device.

Claim 19 (original): The arrangement of claim 16, used in a picture coding device,
wherein the processor is set up such that, variable length coding of the motion vectors is carried out; and a number of stored, different tables, in which codes for variable length coding are stored, are used for variable length coding.

Claim 20 (original): The arrangement of claim 19 wherein the processor is set up such that the tables are matched to the maximum length of the motion vectors.